

Claims

1. A manufacturing method for electrodes that inhibit corona effect on ceramic capacitor includes steps as follows:

the surface of the two electrodes of a ceramic capacitor is coated with
5 conductive paste by a printing process under viscosity control. More
specifically, the surface of electrodes of a common ceramic capacitor sintered
with diameter of 3 mm~30 mm and thickness of 0.8 mm~15 mm is coated
with conductive silver or copper paste by a printing process under viscosity
control;

- 10 the conductive paste covered two electrodes of the ceramic capacitor is
subject to a sintering process to reduce into silver or copper electrode, so the
cross-section of the two electrodes is completely covered with conductive
paste without leakage at outer edge and corona effect is inhibited.

2. As described in claim 1 for a manufacturing method for electrodes that inhibit
15 corona effect on ceramic capacitor, the silver paste in the conductive paste
takes up about 40%~80% and has a viscosity about 10,000~200,000 cps, so
the silver paste is completely applied to the cross-section of the two
electrodes of a ceramic capacitor in 1 um~50 um thickness and does not
create leakage problem.

- 20 3. As described in claim 1 for a manufacturing method for electrodes that inhibit
corona effect on ceramic capacitor, the copper paste in the conductive paste

takes up about 40%~85% and has a viscosity about 10,000~200,000 cps, so the silver paste is completely applied to the cross-section of the two electrodes of a ceramic capacitor in 1 μm ~50 μm thickness and does not create leakage problem.

- 5 4. As described in claim 1 for a manufacturing method for electrodes that inhibit corona effect on ceramic capacitor, the procedures are as follows:

the surface of electrodes of a common ceramic capacitor 1 sintered with diameter of 3 mm~30 mm and thickness of 0.8 mm~15 mm is coated with conductive silver or copper paste by a printing process under viscosity control;

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the conductive paste covered two electrodes of the ceramic capacitor is subject to sintering at 150~850°C to reduce into silver or copper electrode;

the leakage electrode layer at outer edge of the ceramic capacitor is subject to polishing treatment by a 200~1500 μm , 5~100 rpm diamond polishing wheel. The coating overflow area at outer edge of the ceramic capacitor 1 is polished by 0.05 mm~1.0 mm in depth. Thus, the electrode is successfully produced to inhibit corona effect by coating conductive paste on the cross-section of the two electrodes of the ceramic capacitor 1 without leakage problem.

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- 20 5. As described in claim 1 for a manufacturing method for electrodes that inhibit corona effect on ceramic capacitor, the viscosity of the silver or copper paste

is controlled to be about 8,000~150,000 cps, so the surface of the two electrodes of a ceramic capacitor is a 1 μm ~50 μm thick conductive layer without any leakage problem.

6. As described in claim 1 for a manufacturing method for electrodes that inhibit corona effect on ceramic capacitor, the procedures are as follows:

the nickel or copper surface of the two electrodes of a common ceramic capacitor sintered with diameter of 3 mm~30 mm and thickness of 0.8 mm~15 mm is subject to chemical electroless electroplating or vacuum deposition, so the electrodes have a 1 μm ~50 μm thick conductive layer;

the covered electrodes of a ceramic capacitor is subject to a drying process;

the leakage electrode layer at outer edge of the ceramic capacitor is subject to polishing treatment by a 200~1500 μm , 5~100 rpm diamond polishing wheel; the coating overflow area at outer edge of the ceramic capacitor is polished off; thus, the electrode is successfully produced to inhibit corona effect by coating conductive paste on the cross-section of the two electrodes of the ceramic capacitor without leakage problem.